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agt gct aac agt aat aca acc agt ggc tcg aca aat caa gaa tca tct	1444
Ser Ala Asn Ser Asn Thr Thr Ser Gly Ser Thr Asn Gln Glu Ser Ser	
60 65 70 75	
gct act aac aat act gaa aat gct gtt gtt aat gaa agc aaa aat act	1492
Ala Thr Asn Asn Thr Glu Asn Ala Val Val Asn Glu Ser Lys Asn Thr	
80 85 90	
aac aat act gaa aat gct gtt gtt aat gaa aac aaa aat act aac aat	1540
Asn Asn Thr Glu Asn Ala Val Val Asn Glu Asn Lys Asn Thr Asn Asn	
95 100 105	
act gaa aat gct gtt gtt aat gaa aac aaa aat act aac aac aca gaa	1588
Thr Glu Asn Ala Val Val Asn Glu Asn Lys Asn Thr Asn Asn Thr Glu	
110 115 120	
aac gat aat agt caa tta aag tta act aat aat gaa caa cca tca gcc	1636
Asn Asp Asn Ser Gln Leu Lys Leu Thr Asn Asn Glu Gln Pro Ser Ala	
125 130 135	
gct act caa gca aac ttg aag aag cta aat cct caa gct gct aag gct	1684
Ala Thr Gln Ala Asn Leu Lys Leu Asn Pro Gln Ala Ala Lys Ala	
140 145 150 155	
gtt caa aat gcc aag att gat gcc ggt agt tta aca gat gat caa att	1732
Val Gln Asn Ala Lys Ile Asp Ala Gly Ser Leu Thr Asp Asp Gln Ile	
160 165 170	
aat gaa tta aat aag att aac ttc tct aag tct gct gaa aag ggt gca	1780
Asn Glu Leu Asn Lys Ile Asn Phe Ser Lys Ser Ala Glu Lys Gly Ala	
175 180 185	
aaa ttg acc ttt aag gac tta gag ggg att ggt aat gct att gtt aag	1828
Lys Leu Thr Phe Lys Asp Leu Glu Gly Ile Gly Asn Ala Ile Val Lys	
190 195 200	
caa gat cca caa tat gct att cct tat tct aat gct aag gaa atc aag	1876
Gln Asp Pro Gln Tyr Ala Ile Pro Tyr Ser Asn Ala Lys Glu Ile Lys	
205 210 215	

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aat atg cct gca aca tac act gta gat gcc caa aca ggt aag atg gct		1924
Asn Met Pro Ala Thr Tyr Thr Val Asp Ala Gln Thr Gly Lys Met Ala		
220 225 230 235		
cat ctt gat gtc tgg gac tct tgg cca gta caa gat cct gtc aca ggt		1972
His Leu Asp Val Trp Asp Ser Trp Pro Val Gln Asp Pro Val Thr Gly		
240 245 250		
tat gta tct aat tac atg ggt tat caa cta gtt att gct atg atg ggt		2020
Tyr Val Ser Asn Tyr Met Gly Tyr Gln Leu Val Ile Ala Met Met Gly		
255 260 265		
att cca aat tcg cca act gga gat aat cat atc tat ctt ctt tac aac		2068
Ile Pro Asn Ser Pro Thr Gly Asp Asn His Ile Tyr Leu Leu Tyr Asn		
270 275 280		
aag tat ggt gat aat gac ttt tct cat tgg cgc aat gca ggt tca atc		2116
Lys Tyr Gly Asp Asn Asp Phe Ser His Trp Arg Asn Ala Gly Ser Ile		
285 290 295		
ttt gga act aaa gaa aca aat gtg ttc caa gaa tgg tca ggt tca gct		2164
Phe Gly Thr Lys Glu Thr Asn Val Phe Gln Glu Trp Ser Gly Ser Ala		
300 305 310 315		
att gta aat gat gat ggt aca att caa cta ttt ttc acc tca aat gat		2212
Ile Val Asn Asp Asp Gly Thr Ile Gln Leu Phe Phe Thr Ser Asn Asp		
320 325 330		
acg tct gat tac aag ttg aat gat caa cgc ctt gct acc gca aca tta		2260
Thr Ser Asp Tyr Lys Leu Asn Asp Gln Arg Leu Ala Thr Ala Thr Leu		
335 340 345		
aac ctt aat gtt gat gat aac ggt gtt tca atc aag agt gtt gat aat		2308
Asn Leu Asn Val Asp Asp Asn Gly Val Ser Ile Lys Ser Val Asp Asn		
350 355 360		
tat caa gtt ttg ttt gaa ggt gat gga ttt cac tac caa act tat gaa		2356
Tyr Gln Val Leu Phe Glu Gly Asp Gly Phe His Tyr Gln Thr Tyr Glu		
365 370 375		
caa ttc gca aac ggc aaa gat cgt gaa aat gat gat tac tgc tta cgt		2404
Gln Phe Ala Asn Gly Lys Asp Arg Glu Asn Asp Asp Tyr Cys Leu Arg		
380 385 390 395		
gac cca cac gtt gtt caa tta gaa aat ggt gat cgt tat ctt gta ttc		2452
Asp Pro His Val Val Gln Leu Glu Asn Gly Asp Arg Tyr Leu Val Phe		
400 405 410		
gaa gct aat act ggg aca gaa gat tac caa agt gac gac caa att tat		2500
Glu Ala Asn Thr Gly Thr Glu Asp Tyr Gln Ser Asp Asp Gln Ile Tyr		
415 420 425		
aat tgg gct aac tat ggt ggc gat gat gcc ttc aat att aag agt tcc		2548
Asn Trp Ala Asn Tyr Gly Gly Asp Asp Ala Phe Asn Ile Lys Ser Ser		
430 435 440		

ttc aag ctt ttg aat aat aag aag gat cgt gaa ttg gct ggt tta gct Phe Lys Leu Leu Asn Asn Lys Lys Asp Arg Glu Leu Ala Gly Leu Ala 445 450 455	2596
aat ggt gca ctt ggt atc tta aag ctc act aac aat caa agt aag cca Asn Gly Ala Leu Gly Ile Leu Lys Leu Thr Asn Asn Gln Ser Lys Pro 460 465 470 475	2644
aag gtt gaa gaa gta tac tca cca ttg gta tct act ttg atg gct tgc Lys Val Glu Val Tyr Ser Pro Leu Val Ser Thr Leu Met Ala Cys 480 485 490	2692
gat gag gta nnn nnn aag ctt ggt gat aag tat tat ctc ttc tcc gta Asp Glu Val Xaa Xaa Lys Leu Gly Asp Lys Tyr Tyr Leu Phe Ser Val 495 500 505	2740
act cgt gta agt cgt ggt tcc gat cgt gaa tta acc gct aag gat aac Thr Arg Val Ser Arg Gly Ser Asp Arg Glu Leu Thr Ala Lys Asp Asn 510 515 520	2788
aca atc gtt ggt gat aac gtt gct atg att ggt tac gtt tcc gat agc Thr Ile Val Gly Asp Asn Val Ala Met Ile Gly Tyr Val Ser Asp Ser 525 530 535	2836
tta atg ggt aag tac aag cca tta aat aac tca ggt gtc gta tta act Leu Met Gly Lys Tyr Lys Pro Leu Asn Asn Ser Gly Val Val Leu Thr 540 545 550 555	2884
gca tca gta cct gca aac tgg cgt act gct act tat tcc tac tat gca Ala Ser Val Pro Ala Asn Trp Arg Thr Ala Thr Tyr Ser Tyr Tyr Ala 560 565 570	2932
gta cct gta gct ggt cat cct gat caa gta tta att act tct tac atg Val Pro Val Ala Gly His Pro Asp Gln Val Leu Ile Thr Ser Tyr Met 575 580 585	2980
agt aac aag gac ttt gct tca ggt gaa gga aac tat gca act tgg gca Ser Asn Lys Asp Phe Ala Ser Gly Glu Gly Asn Tyr Ala Thr Trp Ala 590 595 600	3028
cca agt ttc tta gta caa atc aat cca gat gac acg aca act gta tta Pro Ser Phe Leu Val Gln Ile Asn Pro Asp Asp Thr Thr Val Leu 605 610 615	3076
gca cgt gca act aac caa ggt gac tgg gtg tgg gac gac tct agt cgg Ala Arg Ala Thr Asn Gln Gly Asp Trp Val Trp Asp Asp Ser Ser Arg 620 625 630 635	3124
aac gat aat atg ctc ggt gtt ctt aaa gaa ggt gca gct aac agt gcc Asn Asp Asn Met Leu Gly Val Leu Lys Glu Gly Ala Ala Asn Ser Ala 640 645 650	3172
gcc tta cca ggt gaa tgg ggt aag cca gtt gac tgg agt ttg att aac Ala Leu Pro Gly Glu Trp Gly Lys Pro Val Asp Trp Ser Leu Ile Asn 655 660 665	3220
aga agt cct ggc tta ggc tta aag cct cat caa cca gtt caa cca aag	3268

aataaggtat aacaggaatt tcttgacta tatgatcctt ccaatataat aatattaggc 4438
cgataagaaa tgaccagcta ccatttcttg atgcttagtg aatataatcg gatgatacgt 4498
cacccctcaa caatccaatt tcacggaggt gagtaatcat gccgagagct aggaatgatt 4558
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ctgcttgcaa aagctt 4634

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Ser Ile Leu Met Gly Gly Val Val Thr Ala His Ala Asp Gln Val Glu
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Ser Asn Asn Tyr Asn Gly Val Ala Glu Val Asn Thr Glu Arg Gln Ala
35 40 45

Asn Gly Gln Ile Gly Val Asp Gly Lys Ile Ile Ser Ala Asn Ser Asn
50 55 60

Thr Thr Ser Gly Ser Thr Asn Gln Glu Ser Ser Ala Thr Asn Asn Thr
65 70 75 80

Glu Asn Ala Val Val Asn Glu Ser Lys Asn Thr Asn Asn Thr Glu Asn
85 90 95

Ala Val Val Asn Glu Asn Lys Asn Thr Asn Asn Thr Glu Asn Ala Val
100 105 110

Val Asn Glu Asn Lys Asn Thr Asn Asn Thr Glu Asn Asp Asn Ser Gln
115 120 125

Leu Lys Leu Thr Asn Asn Glu Gln Pro Ser Ala Ala Thr Gln Ala Asn
130 135 140

Leu Lys Lys Leu Asn Pro Gln Ala Ala Lys Ala Val Gln Asn Ala Lys
145 150 155 160

Ile Asp Ala Gly Ser Leu Thr Asp Asp Gln Ile Asn Glu Leu Asn Lys
165 170 175

Ile Asn Phe Ser Lys Ser Ala Glu Lys Gly Ala Lys Leu Thr Phe Lys
180 185 190

Asp Leu Glu Gly Ile Gly Asn Ala Ile Val Lys Gln Asp Pro Gln Tyr
195 200 205

Ala Ile Pro Tyr Ser Asn Ala Lys Glu Ile Lys Asn Met Pro Ala Thr

210

215

220

Tyr Thr Val Asp Ala Gln Thr Gly Lys Met Ala His Leu Asp Val Trp
 225 230 235 240

Asp Ser Trp Pro Val Gln Asp Pro Val Thr Gly Tyr Val Ser Asn Tyr
 245 250 255

Met Gly Tyr Gln Leu Val Ile Ala Met Met Gly Ile Pro Asn Ser Pro
 260 265 270

Thr Gly Asp Asn His Ile Tyr Leu Leu Tyr Asn Lys Tyr Gly Asp Asn
 275 280 285

Asp Phe Ser His Trp Arg Asn Ala Gly Ser Ile Phe Gly Thr Lys Glu
 290 295 300

Thr Asn Val Phe Gln Glu Trp Ser Gly Ser Ala Ile Val Asn Asp Asp
 305 310 315 320

Gly Thr Ile Gln Leu Phe Thr Ser Asn Asp Thr Ser Asp Tyr Lys
 325 330 335

Leu Asn Asp Gln Arg Leu Ala Thr Ala Thr Leu Asn Leu Asn Val Asp
 340 345 350

Asp Asn Gly Val Ser Ile Lys Ser Val Asp Asn Tyr Gln Val Leu Phe
 355 360 365

Glu Gly Asp Gly Phe His Tyr Gln Thr Tyr Glu Gln Phe Ala Asn Gly
 370 375 380

Lys Asp Arg Glu Asn Asp Asp Tyr Cys Leu Arg Asp Pro His Val Val
 385 390 395 400

Gln Leu Glu Asn Gly Asp Arg Tyr Leu Val Phe Glu Ala Asn Thr Gly
 405 410 415

Thr Glu Asp Tyr Gln Ser Asp Asp Gln Ile Tyr Asn Trp Ala Asn Tyr
 420 425 430

Gly Gly Asp Asp Ala Phe Asn Ile Lys Ser Ser Phe Lys Leu Leu Asn
 435 440 445

Asn Lys Lys Asp Arg Glu Leu Ala Gly Leu Ala Asn Gly Ala Leu Gly
 450 455 460

Ile Leu Lys Leu Thr Asn Asn Gln Ser Lys Pro Lys Val Glu Glu Val
 465 470 475 480

Tyr Ser Pro Leu Val Ser Thr Leu Met Ala Cys Asp Glu Val Xaa Xaa
 485 490 495

Lys Leu Gly Asp Lys Tyr Tyr Leu Phe Ser Val Thr Arg Val Ser Arg
 500 505 510

Gly Ser Asp Arg Glu Leu Thr Ala Lys Asp Asn Thr Ile Val Gly Asp

515

520

525

Asn Val Ala Met Ile Gly Tyr Val Ser Asp Ser Leu Met Gly Lys Tyr
 530 535 540

Lys Pro Leu Asn Asn Ser Gly Val Val Leu Thr Ala Ser Val Pro Ala
 545 550 555 560

Asn Trp Arg Thr Ala Thr Tyr Ser Tyr Tyr Ala Val Pro Val Ala Gly
 565 570 575

His Pro Asp Gln Val Leu Ile Thr Ser Tyr Met Ser Asn Lys Asp Phe
 580 585 590

Ala Ser Gly Glu Gly Asn Tyr Ala Thr Trp Ala Pro Ser Phe Leu Val
 595 600 605

Gln Ile Asn Pro Asp Asp Thr Thr Val Leu Ala Arg Ala Thr Asn
 610 615 620

Gln Gly Asp Trp Val Trp Asp Asp Ser Ser Arg Asn Asp Asn Met Leu
 625 630 635 640

Gly Val Leu Lys Glu Gly Ala Ala Asn Ser Ala Ala Leu Pro Gly Glu
 645 650 655

Trp Gly Lys Pro Val Asp Trp Ser Leu Ile Asn Arg Ser Pro Gly Leu
 660 665 670

Gly Leu Lys Pro His Gln Pro Val Gln Pro Lys Ile Asp Gln Pro Asp
 675 680 685

Gln Gln Pro Ser Gly Gln Asn Thr Lys Asn Val Thr Pro Gly Asn Gly
 690 695 700

Asp Lys Pro Ala Gly Lys Ala Thr Pro Asp Asn Thr Asn Ile Asp Pro
 705 710 715 720

Ser Ala Gln Pro Ser Gly Gln Asn Thr Asn Ile Asp Pro Ser Ala Gln
 725 730 735

Xaa Ser Gly Gln Asn Thr Lys Asn Val Thr Pro Gly Asn Glu Lys Gln
 740 745 750

Gly Lys Asn Thr Asp Ala Lys Gln Leu Pro Gln Thr Gly Asn Lys Ser
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Gly Leu Ala Gly Leu Tyr Ala Gly Ser Leu Leu Ala Leu Phe Gly Leu
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Ala Ala Ile Glu Lys Arg His Ala
 785 790

<210> 12
 <211> 24

<212> DNA
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<220>
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<400> 12
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<210> 13
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<400> 13
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<210> 14
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<212> DNA
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<400> 14
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<210> 15
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<212> DNA
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<220>
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<400> 19
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gaatgttaggt ccaatttttg gc 22

<210> 21
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<210> 22
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arraanswng gngcvvmangt nsw 23

<210> 23
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<220>
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<210> 24
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<400> 24
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<210> 25
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<213> Artificial Sequence

<220>
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<210> 26
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<400> 26

taccgnwsnc tacttcaact t

21

TOEETT a SSSS SSSS G

20